

REMARKS

The Office Action dated March 11, 2004, has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

By this Amendment, claims 3, 5, 10, and 12 have been amended. Support for the amendments to claims can be found throughout the specification and in the claims as originally filed. No new matter has been added. The amendments to the claims do not narrow the scope of the claims. Claims 3-12 are pending and respectfully submitted for consideration.

Claims 3-12 were objected to for minor informalities. The Applicants have amended claims 3, 5, and 12 responsive to the objection.

Claim 10 was separately objected to for minor informalities. The Applicants have amended claim 10 responsive to the objection and submit that all claims are in compliance with U.S. patent practice.

Claims 3-7, 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Osburn et al. (U.S. Patent No. 3,825,245, "Osburn") in view of Matsumiya et al. (U.S. Patent No. 5,291,662, "Matsumiya"). Osburn was cited for disclosing many of the claimed elements of the invention with the exception of the machining tool comprising a coordinate-measuring machine being arranged in the vicinity of the machining tool; moving the tool of the machining tool and a probe of the coordinate-measuring machine to the work in a horizontal direction of motion and orthogonal to each other; and bringing a probe of a coordinate-measuring machine

close to the work in the waiting position of the auto pallet changer. Matsumiya was cited for curing these deficiencies.

Osburn discloses a workpiece changer mechanism for a machine tool. As shown in Fig. 1, the machine includes a horizontal grid 20, machine table 24, supporting pallet table 27 and a work carrying pallet 30 releasably clamped to the pallet table 27 for selective indexable movement therewith. To perform machine operation on the workpiece secured to the pallet 30, a milling cutter carried by tool spindle 40 is selectively movable by affecting relative bodily movement between spindle 40 and pallet 30. Motor 42 is operative to effect X-axis movement of the table 24 and work pallet 30 and moves table 24 to a rightward limit of X-axis movement in preparation for a work or pallet changing operation. Work changer 44 includes a machine base 45, index table 46 rotatably supported by the base, and pallet support 47 carried by the index table for 180° indexable movement. To begin machining, pallet 30 is clamped in the machining station 31 and supports an incomplete machined workpiece. Pallet arm 55 is maintained in a hydraulically retracted empty position shown in Fig. 9. After machining is completed, the empty pallet arm 55 is extensibly advanced outwardly into positive latch engagement with pallet 30 and then reversibly retracted inwardly with the pallet 30 and the now completely machined workpiece carried thereby.

Matsumiya discloses a three-dimensional measuring machine. As shown in Fig. 14, machine 201 is mounted on movable carriage 211. Carriage 211 is positioned adjoining bed 216. Carriage 211 is designed such that the object to be machined can be measured directly at the machining site.

As a preliminary matter, the Applicants respectfully submit that the rejection of claim 12 in view of Osburn and Matsumiya is improper. Claim 12 is directed to and recites a coordinate-measuring machine. As acknowledged in the Office Action, Osburn does not disclose a coordinate-measuring machine. Since Osburn does not disclose any of the features of the invention recited in claim 12, Osburn is an improper reference to apply in combination with Mastumiya to reject claim 12.

The Applicants respectfully submit that Osburn fails to disclose additional features of the invention beyond those acknowledged in the Office Action. In particular, Osburn fails to disclose or suggest measuring the forms and dimensions of said work at the waiting position of the auto pallet changer. Claim 3 recites placing a work on a waiting position of an auto pallet changer directly after the work has been machined by a machining tool and bringing a probe of a coordinate-measuring machine close to said work in said waiting position of said auto pallet changer and then measuring the forms and dimensions of said work. Claim 5 recites a coordinate-measuring machine for bringing a probe thereof close to said work in said waiting position of said auto pallet changer directly after said work has been machined by a tool of said machining tool and placed on said waiting position. Claim 12 recites getting a probe thereof close to a work in a waiting position of an auto pallet changer directly after said work has been machined by a tool of said machining tool and placed on said waiting position. Osburn does not disclose that the workpiece, which is not shown, is moved to a waiting position after it has been machined to measure the forms and dimensions of the workpiece. Osburn also does not suggest or provide a motivation to move the workpiece to a waiting position because there is no disclosure of any further action being taken on the

workpiece after it has been machined. Therefore, Osburn fails to disclose this additional feature of the invention as recited in claim 3.

With respect to claims 3, 5 and 12, Matsumiya fails to cure the above-noted deficiencies in Osburn as Matsumiya fails to disclose or suggest measuring the forms and dimensions of said work at the waiting position of the auto pallet changer.

Also, with respect to claims 3, 5 and 12, Matsumiya further fails to cure the acknowledged deficiencies in Osburn. Claims 3, 5 and 12 recite moving the tool of the machining tool and the probe of the coordinate-measuring machine in a horizontal direction of motion and orthogonal to each other. The Office Action acknowledged that Osburn fails to disclose "the tool of the machining tool and the probe are moved toward the workpiece in a horizontal direction and in a direction orthogonal to each other." See page 3 section 4 of the Office Action. The Office Action took the position that "in the machining tool disclosed by Osburn and Matsumiya, the workpiece will inherently move toward the tool in a direction (horizontal) orthogonal to the direction (vertical) of the probe.

The Applicants respectfully submit that Matsumiya merely discloses a finishing machine, but does not disclose or suggest its direction of movement. Assuming *arguendo* that the finishing machine component and measuring machine probe in Matsumiya move horizontally, as required in the claims of the present application, then the tool of the machining center 215 and the measuring probe of the measuring machine 201 would move in a direction parallel to each other, not orthogonal to each other. There is no disclosure or suggestion in Matsumiya of the direction that the finishing component of the machining center 215 moves with respect to the measuring

component of the measuring machine, therefore, the relative movement between the machining tool disclosed by Osburn and Matsumiya and a probe disclosed by Matsumiya is not inherent. As such, it is not obvious for the elements of Osburn and Matsumiya to move in the claimed direction of the tool and probe as recited in claims 3, 5 and 12.

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Osburn and Matsumiya and further in view of Ohnheiser (U.S. Patent No. 5,996,239). Claims 9 and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Osburn and Matsumiya and further in view of Yoshida et al. (U.S. Patent No. 4,473,883, "Yoshida"). The Applicants respectfully submit that as the combination of Osburn and Matsumiya fails to disclose the features of the invention as recited in claim 5, from which claims 8, 9 and 10 depend. Thus, Osburn and Matsumiya, in combination with Ohnheiser and Yoshida, fails to disclose or suggest each and every feature of the invention as recited in claims 8, 9 and 10.

Under U.S. patent practice, the PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.

Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the combination of references. There is, however, nothing in the applied references to evidence the desirability of these advantages in the disclosed structure.

For at least the combination of foregoing reasons the Applicants respectfully submit that Osburn, Matsumiya, Ohnheiser and Yoshida, either singly or in combination, fail to support a *prima facie* case of obviousness for purposes of a rejection of claims 3-12 under 35 U.S.C. §103.

Claim 4 depends from claim 3, and claims 6-11 depend from claim 5. The Applicants respectfully submit that these dependent claims are allowable at least because of their dependency from allowable base claims 3 and 5. Accordingly, the Applicants respectfully request allowance of claims 3-12 and the prompt issuance of a Notice of Allowability.


Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an

extension, together with any additional fees that may be due with respect to this paper,
may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt.**

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Respectfully submitted,



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